

Abstract

Methods of selectively treating linear elastic materials to produce localized areas of superelasticity and/or shape-memory are disclosed. In an illustrative method, a linear elastic workpiece may be formed into a particular shape by cold-forming or other low-temperature process, and incorporated into a medical device such as an embolic protection filter, vena cava filter, stent or guidewire. A heat source may be used to apply thermal energy to selective areas of the workpiece, imparting superelasticity to the material.